

AMENDMENTS TO THE DRAWINGS

Applicants request approval to amend FIGS. 6, 7, 13-15, 17, and 18 as shown in red on the attached three "Annotated Sheets." In particular, applicants request approval to:

- change reference numeral "62" in FIGS. 6 and 7 to reference numeral --662--;
- change reference numerals "80," "90," and "92" in FIGS. 13-15 to reference numerals --1380--, --1390--, and --1392--, respectively; and
- change reference numeral "18" in FIGS. 17 and 18 to reference numeral --1718--.

REMARKS

Summary of Office Action

Claims 1-76 were pending in this application.

The Examiner objected to claims 14, 16-20, 38, 40-44, 54, and 65-70 for being dependent upon a rejected base claim, but indicated that these claims would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

The Examiner rejected claims 1-13, 15, 21, 30-37, 39, 51-53, 55-64, and 71 under 35 U.S.C. § 103(a) as being obvious from Markworth et al. U.S. Patent No. 6,660,006 (hereinafter "Markworth") and Lichtman U.S. Patent No. 5,318,589 (hereinafter "Lichtman"). Dependent claims 22-26, 46-50, and 72-76 were rejected under 35 U.S.C. § 103(a) as being obvious from Markworth, Lichtman, and Errico et al. U.S. Patent No. 5,688,274 (hereinafter "Errico").

Claims 27-29 and 45 were rejected under 35 U.S.C. § 102(e) as being anticipated by Markworth.

Dependent claims 21-26, 45-50, and 71-76 were objected to for being of improper form because they fail to further limit the subject matter of the previous claim.

The Examiner objected to the drawings because several FIGS. show different embodiments with the same reference numerals.

Summary of Applicants' Reply

Applicants appreciate the indication that claims 14, 16-20, 38, 40-44, 54, and 65-70 contain allowable subject matter.

Applicants submit herewith three sheets of drawings each marked "Replacement Sheet" of amended FIGS. 6, 7, 13-15, 17, and 18, and three sheets of drawings each marked "Annotated Sheet," showing the reference numeral amendments made to originally-filed FIGS. 6, 7, 13-15, 17, and 18.

Applicants have amended the specification to conform to the reference numeral amendments in the drawings.

Independent claim 51 has been amended to include all the limitations of dependent claims 52-54, which have been accordingly canceled.

Objected-to claims 16, 40, 65, and 66 have been rewritten in independent form including all the limitations of their respective base claim (there were no intervening claims).

Dependent claims 21, 45, and 71 have been amended to further limit the subject matter of their respective previous claim.

And claims 4, 29, and 58 have been amended to correct an antecedence error.

No new matter has been added.

Reconsideration of this application in view of the amendments and following remarks is respectfully requested.

Objections to the Drawings

The Examiner objected to the drawings because several FIGS. show different embodiments of the same assembly/part with the same reference numerals. In particular, the Examiner said:

- (1) FIGS. 2 and 3 show an embodiment of the holder assembly and FIGS. 4 and 5 show another with the same reference numerals;
- (2) FIGS. 6 and 7 show an embodiment of the tubular member and FIGS. 8 and 9 show another with the same reference numerals;
- (3) FIGS. 10-12 show an embodiment of the pusher member and FIGS. 13-15 show another with the same reference numerals; and
- (4) FIG. 16 shows an embodiment of the actuating member and FIGS. 17 and 18 show another with the same reference numerals.

These drawing objections are respectfully traversed.

Applicants submit herewith "Replacement Sheets" and "Annotated Sheets" of amended FIGS. 6, 7, 13-15, 17, and 18.

Regarding (1) above, note that FIGS. 2 and 3 and FIGS. 4 and 5 do not show different embodiments of the same assembly. Instead, they show two different assemblies: FIGS. 2 and 3 show an embodiment of holder assembly 12, and FIGS. 4 and 5 show an embodiment of release assembly 14. Thus, no changes to those drawings are needed.

Regarding (2) above, applicants request approval to change reference numeral "62" in FIGS. 6 and 7 to reference numeral --662--, as shown in red on the attached annotated sheet. Applicants have also amended paragraphs 40-43 of the specification to conform to the drawing change.

Regarding (3) above, applicants request approval to change reference numerals “80,” “90,” and “92” in FIGS. 13-15 to reference numerals --1380--, --1390--, and --1392--, respectively, as shown in red on the attached annotated sheet. Applicants have also amended paragraph 54 of the specification to conform to the drawing changes.

Regarding (4) above, applicants request approval to change reference numeral “18” in FIGS. 17 and 18 to reference numeral --1718--, as shown in red on the attached annotated sheet. Applicants have also amended paragraph 60 of the specification to conform to the drawing change.

In sum, the drawings should no longer be objectionable.

Accordingly, applicants respectfully request that the objections to the drawings be withdrawn.

Objections to Claims 21-26, 45-50, and 71-76

Dependent claims 21-26, 45-50, and 71-76 were objected to for being of improper form because they fail to further limit the subject matter of the previous claim. In particular, these claims add limitations to unclaimed elements.

These objections are respectfully traversed.

Dependent claims 21, 45, and 71 have been amended to claim the elements to which the limitations recited in those claims apply. Dependent claims 22-26, 46-50, and 72-76 depend directly or indirectly from claims 21, 45, and 71, respectively.

Accordingly, applicants respectfully request that the objections to claims 21-26, 45-50, and 71-76 be withdrawn.

Rejections of Claims 1-13, 15, and 21-26 Under 35 U.S.C. §103(a)

Claims 1-13, 15, and 21 were rejected under 35 U.S.C. §103(a) as being obvious from Markworth and Lichtman. Claims 22-26 were rejected under 35 U.S.C. §103(a) as being obvious from Markworth, Lichtman, and Errico.

These rejections are respectfully traversed.

Independent claim 1 defines a surgical instrument having a release assembly that includes a tubular member. The tubular member is sized and configured to be slidably disposed within a holder assembly.

Markworth does not disclose or suggest a release assembly that includes a tubular member, but instead discloses a pusher assembly that includes a slide 300. Slide 300 has “a channel 310 extending longitudinally on its bottom side along the entire length of the slide” (Markworth column 6, lines 4-6). Slide 300 slides on top of a body 200, which has a pair of fingers 206 extending from an end thereof.

Lichtman discloses a tissue-manipulating instrument for endoscopic procedures that includes a jaw piece 2, an outer tube 8, and an inner tube 10. “[J]aw piece 2 is ... rigidly connected to ... inner tube 10” and “outer tube 8 ... is coaxial with and freely fitted over inner tube 10” (Lichtman column 5, lines 10-18).

The Examiner said “it would have been obvious to one of ordinary skill to interchangeably use sliding plate/tubular like elements (200 and 300) of Markworth, et al and coaxial tubes (8 and 10) of Lichtman to operate jaws/fingers at the distal end of a device to grasp an object” (March 3, 2006 Office Action, page 4).

Assuming arguably that Lichtman's inner and outer tubes 8,10 are functionally or mechanically equivalent to Markworth's slide 300 and body 200, applicants point out that "components which are functionally or mechanically equivalent are not necessarily obvious in view of one another" MPEP § 2144.06.

Furthermore, the "mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." MPEP § 2143.01(III).

Applicants respectively submit that the combination of Markworth and Lichtman is improper, because there is absolutely no reason why one of ordinary skill in the art would have been motivated to replace Markworth's slide 300 and body 200 with Lichtman's inner and outer tubes 8,10.

Neither reference provides any motivation, suggestion, or teaching whatsoever for replacing its structure with the structure of the other.

In particular, Markworth does not indicate in any way whether or not its slide and body can be replaced by inner and outer tubes -- much less whether or not such a substitution would be desirable.

Likewise, Lichtman does not indicate in any way whether or not its inner and outer tubes can replace a slide and body (as in Markworth) -- much less whether or not such a substitution would be desirable.

In sum, neither reference indicates whether or not replacement of a slide and body with inner and outer tubes is doable or desirable.

Thus, a person of ordinary skill in the art would not be motivated in any way whatsoever to replace the slide and body of Markworth with the inner and outer tubes of Lichtman.

Thus, the combination of Markworth and Lichtman is improper, and independent claim 1 should therefore be allowable.

For at least these reasons, dependent claims 2-13, 15, and 21-26, which depend directly or indirectly from independent claim 1, should also be allowable (i.e., dependent claims are allowable if their independent claim is allowable).

Accordingly, applicants respectfully request that the rejections of claims 1-13, 15, and 21-26 under 35 U.S.C. §103(a) be withdrawn.

Rejections of Claims 27-37, 39, and 45-50

Claims 27-29 and 45 were rejected under 35 U.S.C. §102(e) as being anticipated by Markworth. Dependent claims 30-37 and 39 were rejected under 35 U.S.C. §103(a) as being obvious from Markworth and Lichtman, and dependent claims 46-50 were rejected under 35 U.S.C. §103(a) as being obvious from Markworth, Lichtman, and Errico.

These rejections are respectfully traversed.

Independent claim 27 defines a surgical instrument having a holder assembly. The holder assembly has “a pair of fingers each including an inward pointing ledge ... sized and configured to contact an underside of an edge of the spinal implant” (emphasis added).

As described in applicants' specification, "ledges 56 [of fingers 40,42] are sized and configured to contact lower edge 234 of the ... pedicle screw" (page 6, lines 6-7; *see also* applicants' FIGS. 2 and 19).

The advantage of such contact is "to permit the pedicle screw to be freely rotatable, transversely moveable and/or axially moveable within the fingers 40, 42" (applicants' specification, page 9, lines 11-12).

Markworth does not show or suggest a holder assembly having fingers sized and configured to contact an underside of a spinal implant. To the contrary, Markworth discloses fingers 206 having "notches 211 that correspond to the shape of coupling element 104. As shown in FIG. 1E, the coupling element 104 defines grooves 105 for receiving notches 211" (Markworth column 5, lines 41-44). Grooves 105 are plainly on the side of coupling element 104.

Accordingly, Markworth's fingers 206 are sized and configured to contact the side of coupling element 104 (*see* Markworth's FIG. 1D). Moreover, nothing in Markworth even remotely indicates whether or not its fingers 206 are able to reach the underside of its coupling element 104.

Markworth further discloses that "[o]nce in position, the fingers 206 securely grip the coupling element 104 via the grooves 105" (Markworth column 5, lines 48-50). Markworth therefore does not disclose or suggest applicants' advantage of permitting the pedicle screw "to be freely rotatable, transversely moveable and/or axially moveable within the fingers" – and thus in no way provides any suggestion of applicants' holder assembly.

Independent claim 27 is therefore not anticipated by Markworth.

Furthermore, claim 27 is not rendered obvious from the combination of Markworth and Lichtman or Markworth, Lichtman, and Errico. In particular, neither Lichtman nor Errico shows or suggests in any way a holder assembly having fingers sized and configured to contact an underside of a spinal implant and thus, neither reference makes up for the deficiencies of Markworth.

Independent claim 27 should therefore be allowable.

For at least these reasons, dependent claims 28-37, 39, and 45-50, which depend directly or indirectly from independent claim 27, should also be allowable (i.e., dependent claims are allowable if their independent claim is allowable).

Accordingly, applicants respectfully request that the rejections of claims 27-37, 39, and 45-50 under 35 U.S.C. §102(e) or 35 U.S.C. §103(a) be withdrawn.

Objections to Claims 14 and 38

Dependent claims 14 and 38 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

These objections are respectfully traversed.

For at least the reasons discussed above with respect to independent claims 1 and 27, dependent claims 14 and 38, which indirectly depend from claims 1 and 27, respectively, should no longer be objectionable.

Accordingly, applicants respectfully request that the objections to claims 14 and 38 be withdrawn.

Rejections of Claims 51-53, 55-64, and 71-76 Under 35 U.S.C. § 103(a)

Claims 51-53, 55-64, and 71 were rejected under 35 U.S.C. §103(a) as being obvious from Markworth and Lichtman, and claims 72-76 were rejected under 35 U.S.C. §103(a) as being obvious from Markworth, Lichtman, and Errico.

These rejections are respectfully traversed.

Independent claim 51 has been amended to include all the limitations of dependent claims 52-54, which have been accordingly canceled.

The Examiner indicated that dependent claim 54 would be allowable if rewritten in independent form including all the limitations of the base claim (claim 51) and any intervening claims (claims 52 and 53). Thus, independent claim 51 should now be allowable.

For at least these reasons, dependent claims 55-64 and 71-76, which depend directly or indirectly from independent claim 51, should also be allowable (i.e., dependent claims are allowable if their independent claim is allowable).

Accordingly, applicants respectfully request that the rejections of claims 51, 55-64, and 71-76 under 35 U.S.C. §103(a) be withdrawn.

Objections to Claims 16-20, 40-44, 54, and 65-70

Dependent claims 16-20, 40-44, 54 and 65-70 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

These objections are respectfully traversed.

As discussed above, dependent claim 54 has been canceled, rendering moot the objection thereto.

Dependent claims 16, 40, 65 and 66 have each been rewritten in independent form including all the limitations of their respective base claim (there were no intervening claims).

Thus, claims 16, 40, 65 and 66, and claims 17-20 (which depend directly or indirectly from claim 16), claims 41-44 (which depend directly or indirectly from claim 40), and claims 67-70 (which depend directly or indirectly from claim 66) should no longer be objectionable.

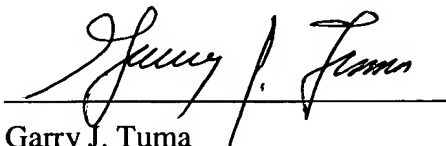
Accordingly, applicants respectfully request that the objections to claims 16-20, 40-44, and 65-70 be withdrawn.

Application No. 10/822,599
June 1, 2006 Reply To Office Action

Conclusion

The foregoing demonstrates that claims 1-51 and 55-76 are allowable. This application is therefore in condition for allowance. Reconsideration and allowance are accordingly respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Garry J. Tuma", is written over a horizontal line.

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Attachment – Three Replacement Sheets and Three Annotated Sheets of Drawings

ANNOTATED SHEET

Application No. 10/822,599

Filed April 12, 2004
Attorney Garry J. Tuma (40,210)

Group Art Unit 3733
Docket No. 8932-927-999

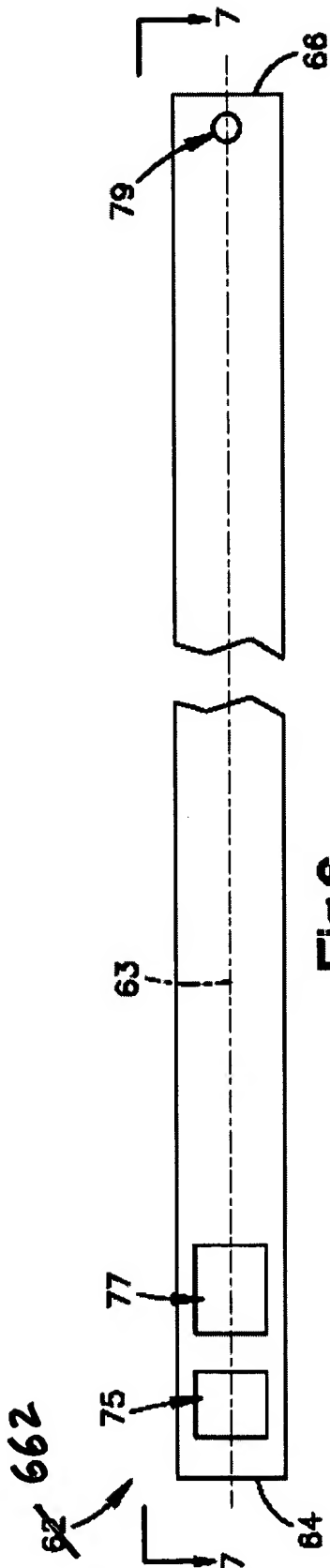


Fig. 6

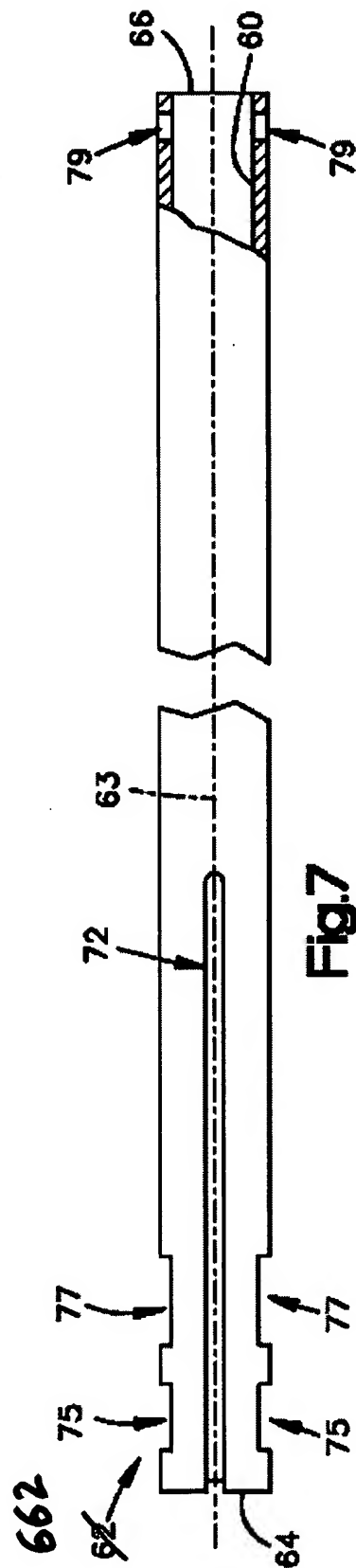


Fig. 7

ANNOTATED SHEET

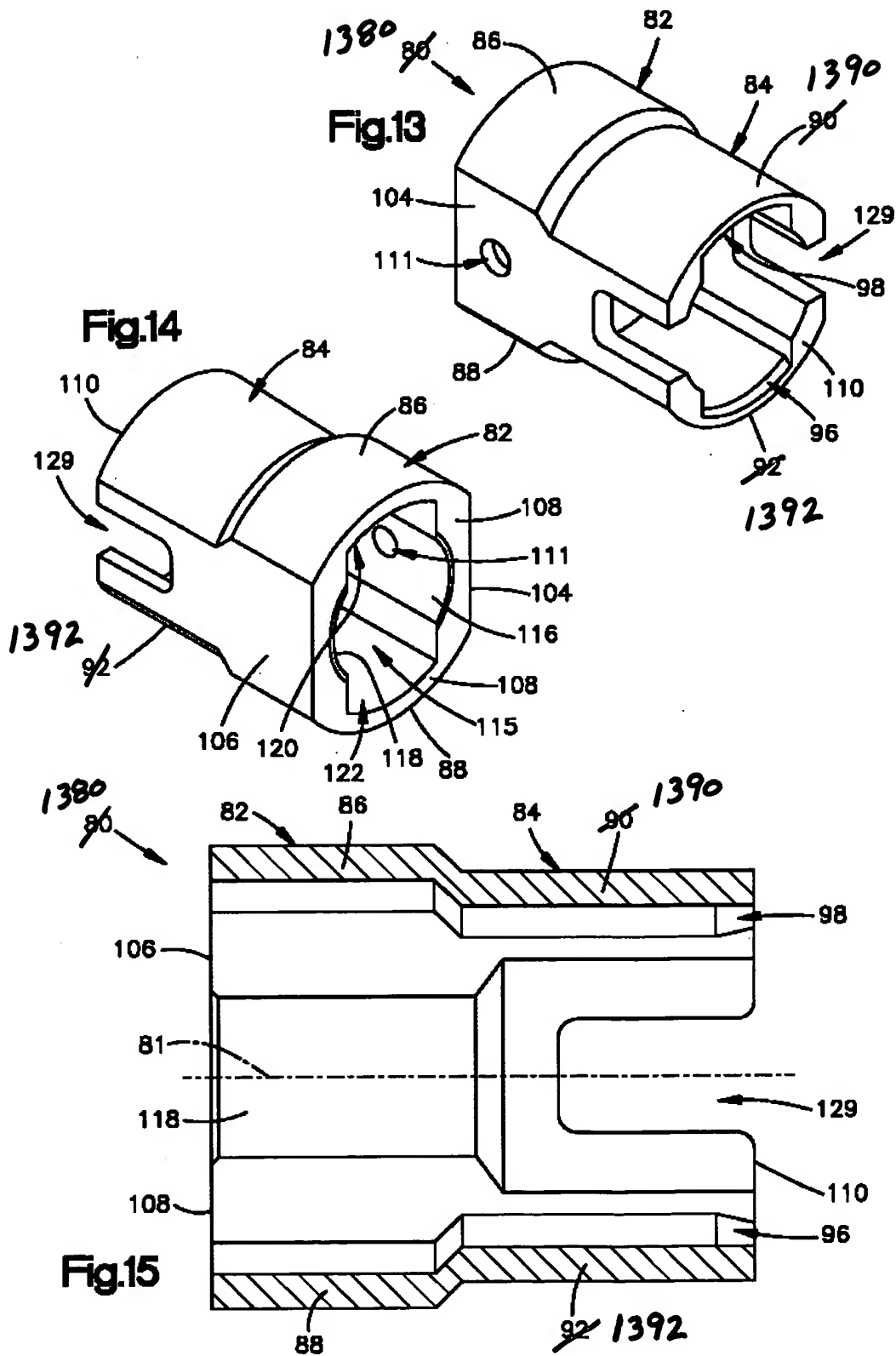
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